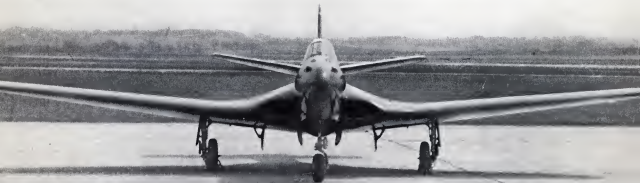


Aviation News

McGRAW-HILL PUBLISHING COMPANY, INC.

JANUARY 14, 1946



Carrier-borne Jet Plane: *This FD-1 Phantom, designed and built by the McDonnell Aircraft Corp. is the first carrier-type aircraft powered exclusively by jet engines. Already extensively flight-tested the Phantom has a service ceiling in excess of seven miles and is the first Navy fighter to attain speeds of 500 mph. Powered by two axial-flow Westinghouse turbo-jets built into the wingroots, the Phantom has a range of over 1,000 miles. (See Headline News)*

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Weather cuts lightplane attendance; personal aviation gains little.....Page 7

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New Cessna's Price Likely To Jolt Other Firms

125-mph. lightplane will sell for \$2,495, well under cost of similar craft.....Page 13

New Civil Aviation Parley Opens in Bermuda

U. S., Britain apparently enter conference set on having own ways.....Page 31



Unnamed, Unknown, Unsung but Still... 1st

After completing more "firsts" than any of its combat units, the Honeywell test bomber, a B-17 Flying Fortress, has been officially grounded, over to the agency.

Stripped of torpedoes, guns and armor plate, the bomber, designated as 3-10, has been called into its crew, it being transferred to the University of Minnesota's Aeronautical Engineering Department by AFSC, absorbing more than three and one-half years in Minneapolis in the shop for a long list of electronic control devices jointly developed by technicians of the company and the Air Force.

The Honeywell test ship was the:

1. First bomber equipped with an electronic navigation system.
2. First plane equipped with an electronic landing gear indicator.
3. First plane equipped with a warning system (ring in order) with flight control.
4. First plane equipped with an electronic throttle stick.
5. First plane equipped with electronic down engine (air) speed indicator control and engine fire or bleed-off equipment.

From these accomplishments you can readily see how Honeywell means engineering (as well) will help you improve performance of all types of aircraft.

The Honeywell program includes a complete flight research department, test aircraft and thousands of dollars worth of testing equipment. In addition, test application equipment, with broad experience in the use of aerodynamic and industrial controls, will collaborate with aircraft manufacturers and airlines in developing the most practical equipment for each specific problem. Their work includes consulting service and flight testing at the customer's plant. Their men can help you in the application of Honeywell equipment to your control problems.

Minneapolis-Honeywell Regulator Co., Aeronautical Division, 1669 Fourth Avenue So., Minneapolis 14, Minnesota. Branches and distributing offices in all principal cities.



CREATIVE INSIGHTING

History of the Service Unit
Electronic Division and its
AFSC Honeywell facilities

THE AVIATION NEWS

Washington Observer

JET TYPES—First that Army and Navy are pursuing different policy in the development of jet engines isn't too surprising. The same thing was done with conventional engines under an agreement that the Navy would concentrate on air-cooled, Army on liquid-cooled. Result was that company went into the war with both types highly developed.

SULLIVAN AGAIN—Despite talk of Edwin Pusey giving the Navy secretariatship when Roosevelt steps down (which may cause it) agreement is reached on no-agency there is considerable impasse being in Washington that the post will go to John L. Sullivan, now Assistant Secretary of the Navy for Air.

INTEGRATION AND UNIFICATION—Some quarters in Washington believe the services will come up with an integration program that will replace the unification proposal of the Army and send the latter back to zero so come if something isn't worked out AAF is reviewing some better pulls in the War Department and is expected ready to pull out in favor of an integration in which it would get in independent. General outline of the new plan: direct departments, Army, Navy and Air, with an added department or joint agency for common procurement, industrial mobilization planning, hospitals, warehouse, etc. Joint chiefs of staff would remain. More in being handled properly, will leave some services out on a limb.

PROGITS—The Vinton-Tremont Act, building profit on aircraft and Navy ships and parts thereof, is in effect again with approval of the revenue profits act. The Act has been suspended by the Revenue Act of 1940, which authorized the act, HR-4821, introduced by Vinton.

son himself is invited the Act, is pending but is not being pushed. No hearings have been scheduled. The Act calls for a limit of from 10 to 12 percent profit on all contracts over \$15,000 for Army and Navy airplanes and Navy ships, and components—including compasses fixed for contract. Government agency have been advised of authorization of the law. Cost is Army contract not based upon T. D. (Treasury Division) 5000, a guide for calculating cost under the Vinton-Tremont Act. Cost is Navy contract not based upon the "green" book, "Principles for the Determination of Costs," which the Navy regards as a streamlined interpretation of T. D. 5000.

STORMS ASHORE—Reconstruction Finance Corp. officials are waiting to see what term the relations between L. G. G. Lloyd & Gregory and the Surplus Property Administration will take when Gregory and the War Assets Corp. take over surplus disposal operations Jan. 15. RFC people have been complaining that SPA has not been cooperative with moving publicists—it is supposed to do under the act—but that it also has been trying to control actual operations. Gregory's successful career in Quartermaster General gives no indication that he would welcome SPA "interference" in a job over which he is supposed to be complete boss.

UNWANTED ENGINES—Symptomatic of the engine disposal headache faced by RFC is the fact that although four well-known makers of low-powered engines have negotiated agency agreements, the leading manufacturers of large engines—Curtis-Wright and Pratt & Whitney—are having no part of the situation. Large number of engines in surplus are the big ones.



Side view of the McDonnell F4U Corsair, Navy jet fighter (see Washington News)



The Boeing Superfortress—incorporating all the aerodynamic refinements proved in the B-27 Superfortress—brings to air from the same skill and experience in research, design, engineering and manufacture that gave America the B-27, the staunch B-17 Flying Fortress, the mass-producing Clipper, the Devilfish and other great Boeing airplanes. "Built by Boeing," it's bound to lead.

BOTH BUILT by BOEING



FOE PEACETIME TRAVEL—THE NEW HORING STRATOCHIEFS

Miami Show, Curbed By Weather, Found Lacking on Many Points

Lightplane aerocade from northern states greatly reduced; military planes and stunt flyers not seen, but little attempt is made to put personal aviation over with crowd of 40,000 which attended three-day meeting.

By J. K. VAN DENBURG, JR.

America's first big post-war airshow—the 14th annual All-American Air Meet—was celebrated at Miami, Fla., crowded for three days, Jan. 4-6, but whether it was a success or a failure would be hard to say.

Show officials had a total of 46,000 attended the meet at the city's International Airport, far out in the suburban scrublands. Somewhere between 900 and 1,500 private planes, so war knew for sure, brought civilian flyers south for the event. And more than 2,000 flyers and aviation industry figures registered at the Columbus Hotel headquarters.

Weather—Bad weather kept many lightplanes grounded along the airway from the north. More than 2,000 had been expected to join in the aerocade sponsored by lightplane producers and the Gulf Oil Co., and late arrivals told of hundreds of pilots "sticking it out" up the line. About 600 private planes were staged out at International Airport, with several hundred others at other fields in the area.

The meeting had moderately good weather throughout the three days. There was a ceiling of 3,500 ft. or better with scattered clouds, but a fresh southeasterly wind blew strongly and somewhat hampered lightplane flying. It gave pilots a difficult

headwind on the way down, but boomed along those who started home blowing.

A speedster—the show was a crowd-pleaser, with racing aerobikes, aerobikes and high-speed demonstrations.

But it is doubtful whether it did much to boost general aviation with the non-flying public.

Backs—There was the weather hurdle which kept many lightplanes away although airlines were operating on schedule—providing a poor opportunity.

The wind and/or poor seeing kept racing entries down and consequently gave spectators little chance to see lightplanes in action.

The show was so arranged that the public entered the field at the farthest possible point—down the lightplane parking area and down walked the three-quarters of a mile toward the dismounts to that section of the field.

A mid-air collision during the Aerocade race plagued one plane to the ground and seriously injured its pilot.

Registration badges, worn by all participating in the show, did not indicate those who flew down to their own planes—and a good chance to demonstrate to Florida and winter visitors the utility of



Retired Trooper Frank Sheddman, who was training the Furthest Trophy race at the Miami Air Meet, says that the Miami Air Meet, which was held at the same time as the Miami Air Meet, was the trophy race, which was held at the Miami Air Meet, which was held at the Miami Air Meet.

the lightplane was lost.

Critics—On the favorable side of the balance sheet were demonstrations of aviation's advances and possibilities.

The Navy and Marine Corps put on a display of their new bombers and torpedo planes through their guns in both domains and low-level flying.

The Army had a P-48 on hand to show the crowd the possibilities with its speed, a Sikorsky HO-4 helicopter to show its upward flight characteristics, and a line-up of bombers and fighters, from the Mustang to the Superfortress, near the entrance.

Prizefighter introduced by Col. Mike Murphy, himself (Hawkeye) Howard, who was the Carolina Trophy, Woody Edmondson (Jockey), and Jimmy Mason (Hawk) showed what small planes could do if the pilot's



Swing Start at Miami: Five Encounters got off in a record-day event at the Miami All-American Air Meet. It was in this race that two planes collided while rounding a turn. In the background is the main hangar at Miami's International Airport, now under Army operation, where the show was held.

starting of Lester Koffman's flight by Kenneth Berlinger.

Sideways—Also on the credit side was an exhibition in a downtown newspaper mezzanine where approximately 60 displays had been placed by the Army, Navy, Coast Guard and manufacturers. Despite constant "glugs" by the thousands at the airport it drew comparatively small crowds, however. It was to remain open through Jan. 12.

Edmondson Wins Feature at Miami

Feature race at the Miami All-American Air Meet was won by Woody Edmondson, flying a Monocoupe. His time in the 36-mile free-for-all event for the Glen H. Curtis Trophy was 24 min. 41 sec., or an average speed of 136.4 mph.

Second place went to Matt Brown, Lynchburg, Va., and third place to Jack Zerk, Miami. Both of them also flew Monocoupes.

Other Races—Results in the other races were:

Lumberco—12½ mi. Honolulu Mo., Jacksonville, Fla., 10 min. 45 sec.; Joe Harris, Miami, second;

Moody Lamon, Lansing, Mich., third.

Pipers—13½ miles; Tom Davis,



Air Show Close: Last day of the Miami All-American Air Meet saw a bantam chucked into the air—surplus Stearman biplane which had just been evicted as a "door prize" and tamed it into the handstand. High school musicians scattered to safety as the plane's propeller sliced into the treble table and crushed several of the cords.

Old-Time 'Blood Bath' Missing

The "blood bath" which used to characterize air shows was noticeably at its absence at the Miami All-American Air Meet, although several crashes did see the light.

In the Brouse race on the second day the first-place ship, piloted by M. J. Miller, Markville, N. C., left and was demolished after the second-place plane chucked into its tail to they came out of a turn and headed up the line in front of the crowd. Miller suffered minor injuries when the plane crashed into the left-field parking area about a half-mile from the stands, wrecking a parked plane. The Brouse which had been had its propeller damaged and was taken to for a check-out heading in front of the crowd by an old pilot, Thomas Miller, Raleigh, N. C.

Close Range—Last day of the meet a bantam chucked into a six-surplus Stearman biplane just awarded as a "door prize" and tamed it about 25 ft into the handstand. As spectators dared to enter the plane's propeller sliced up

several spectators still remaining to be awarded.

Now, after, a Luscombe, piloted by Herbert Myers, Oklahoma City, crashed on takeoff in the opposite side of the hangar field. Myers' engine was fractured but no unidentified passenger was hurt.

A Morse Courier ground-looped on landing, due to landing gear failure, and several private planes roared over at various times during the meet when they became bogged down in the soft mud beside the runway.

Close Shave—In addition, Capt. John C. Henderson military attaché in Washington, and Capt. Jorge Marcano, Venezuelan air attaché in Washington narrowly escaped serious injuries when a railroad train demolished their plane. Police had halted the lead cars of the military convoy carrying a party of Latin American officers to the show and the action left the one side sitting squarely in the train. The two cars jumped to safety but three drivers were badly injured.

Walter-Salem, N. C. (Flying the 1,000th Cub built since V-J Day) 11 min. 50 sec.; John Tresh, New Brunswick, N. J., second; C. M. McClelland, Miami, third.

Avcocon—12½ miles; S. A. Green, Jr., New York City, 5 min. 36 sec.; Dave Dahlst, Miami, second; S. A. Powell, Miami, third.

Aerocoon—12½ miles; Karl Tolver, 12 min. 34 sec.; Woody Edmondson, Lynchburg, Va., second.

Wherry 2 Stearwheats, third.

Foremost Trophy (lightplane hand-dump)—33 miles; Jack Goodgreen, Waterline, Iowa, 9 min. 52 sec. (Taylorcraft); R. A. Davis, Jr., New York City (Avcocon second); Karl Tolver (Aerocoon) third.

Women's Race—2½ miles; Vera Burke, Miami, 14 min. 29 sec. (Cub); Don Lamon, Miami Beach, second; Helen McBride, Apopka, Fla., third.

Program Cut—Forty-seven events had been scheduled originally, but wind and lack of entries cut the program.

Jack Reno Dies

Jack Reno, 31, Pittsburgh, veteran balloonist died last week. He made more than 3,000 ascensions. He was a member of the Balloonists of America, the Aeronaetic Club of Maryland, and the Aero Club of Pittsburgh.

Joint Overseas Service Set-Up Will Be Proposed By Industry

AIA Export Committee will present plan for government approval as method of handling problem of maintaining war-surplus U. S. aircraft sold to foreign customers.

By WILLIAM KROGER

Proposals for a jointly-owned overseas service corporation to maintain U. S. 35-year aircraft sold to foreign customers by the Foreign Liquidation Commission will be presented to government officials today by the aircraft industry.

That was the most tangible suggestion of how to meet an increasingly vexatious problem, with worldwide implications, an export trade, that was discussed last week in a meeting at Miami of the Export Committee of the Aircraft Industries Association. Plans for a solution to the industry need, the AIA and the FLC.

Sales Hoop—FLC is due to close last week \$5,500,000 worth of aircraft and parts to foreign purchasers. Although the buyers, chiefly airlines, are able to acquire spare parts with the aircraft, no arrangements can be made for servicing and maintaining the aircraft. That is a matter beyond the province of FLC. U. S. manufacturers of the equipment could do it only as service contracts which would be prohibited as a service and maintenance basis alone.

If a servicing arrangement could be worked out FLC would find it easier to sell the surplus material. AAF, which has the job of scrapping surplus FLC cannot sell, is also eager to boost sales. The industry wants to avoid any possible reduction in U. S. products that might arise from scrapping due to faulty servicing and maintenance. This becomes of prime importance in view of the coming battle with Britain for commercial export trade.

Plan—That is the essence of the dilemma posed to AIA's Export Committee by AAF and FLC officials. The outcome of the Miami meeting was that the committee agreed to drive up the industry's outline of how best to meet the problem. An agreement considered, it would entail "agency agreements"—such as used by the Reconstruction Finance Corp. in the disposal of surplus engines and parts—between FLC and individual companies

whereby the manufacturers would obtain exclusive sales rights for surplus parts they originally produced. They would then sell those under contract to foreign aircraft purchasers, and the contracts would provide for service.

However, as the dollar volume involved would be relatively small, not all the manufacturers might be able to afford to underwrite the extensive service and maintenance arrangements necessary. Therefore, it is anticipated that a joint overseas service corporation would be formed by those manufacturers coming into the agency agreements.

Signed in Key—While the proposal is too recent for a reaction yet to be obtained from the Government department concerned, the AAF and FLC representative sitting in on the Miami meeting looked with favor upon it. In Washington, however, it is pointed out by FLC officials that if the industry actually wants such a system inaugurated, speed is paramount.

FLC last week completed a deal with Great Britain whereby the entire stock of surplus aircraft equipment in England will be sold

to the British government, with payment included in the \$4300-600,000 loan to Great Britain. A bulk sale of surplus in India is in the works, and FLC expects to open similar negotiations soon with New Zealand and Australia.

Miami Sales Center—Industrious of the fast-moving, modern sales methods FLC has limited to close one of its surplus in the export sales center soon to be opened in Miami, and shown to the industry representatives in a preview. Occupying a former Air Technical Service Command building containing 250,000 sq. ft. of floor space, the sales center is complete with charts, graphs and other up-to-the-minute merchandising paraphernalia. Sales catalogs, to be ready about March 1, will be printed in English, Spanish and Portuguese.

While agreed with this eye-catching display of FLC's sales technique, and aware that it was aimed at luring the South American business kung fu, by Havana, the industry representatives were at the same time slightly disconcerted to see such effort lavished on the sale of old aircraft, when one of the industry's major problems is to get back into the export market with new aircraft.

Pointed up—Thus FLC display, whether calculated or not, pointed up the Government's contention that it would be to the industry's advantage to see that the planes used abroad and bearing the label of U. S. manufacturers be maintained in such condition as to be a credit to U. S. productive skill.



Aerobatic Winner: Miss Betty Carrigan, noted speedster rider and Sher, Anna Bessley Howard the Curtiss Trophy for winning first place in the aerobatic competition at the Miami Air Meet, was Woody Edmondson (center) second-place winner and Woody Edmondson (left), look on (For other news of Air Meet activities, see Private Flying).

New Congress Session Convenes With Ambitious Aviation Plans

Thorough investigations of national and international transportation policies soon as most significant, with comprehensive legislation likely as outcome.

The new session of Congress convenes the week with plans for ambitious undertakings in the aviation field.

Through investigations of national and international transportation policies, exemplified by both House and Senate committees, figure as probably the most significant aviation interests on the Congressional agenda. The investigations are preliminary for comprehensive legislation.

Integration—The House Interstate and Foreign Commerce Committee already has had the groundwork for its investigation, expected to highlight the need for integration among the various modes of transport—air, waterway, highway, and rail—in the domestic field. The committee's files are replete with documents from the Interstate Commerce Commission and the House Chairman Clarence Lea (D, Calif.) of House Interstate transportation committee will have cleared previous study of related reports and be prepared to launch public hearings soon.

Research—On the Senate side, Interstate Commerce Committee plans to investigate international and domestic transport policies under Senate approval of the McFarland

resolution authorizing the review. The resolution has already cleared Interstate Commerce and the Commerce on Expenses.

The investigation, giving the committee a window to capture jurisdiction over aviation, can be expected to meet with opposition from members of Senate Commerce Committee. The jurisdiction dispute over aviation between the two committees is still hanging fire.

While interstate non-aviation enterprise forming post-war air transport legislation by tying it up with overall transport legislation, the Commerce Committee plans to consider consideration of the aviation domestic aviation bill introduced by Sen. Pat McCarran (D, Nev.) early last year. Chairman Joseph Eastland (D, Miss.) of Senate Commerce already has renewed McCarran to act dated for hearings on the measure, which, among other things, re-establishes an independent Civil Aeronautics Authority.

Security—The division of House Interstate to keep aviation legislation in with over-all transport legislation and the progress of Senate Commerce to take up the amendment McCarran bill have slight hope that Congress will take decisive action during the coming year on air transport problem. House Interstate has abandoned its previous plan to act separately on domestic aviation issues, such as state protection over interstate carriers,

multiple taxation, a separate CAA.

The time-consuming difficulties and wrangling involved in shoring overseas aviation legislation, let alone American transportation legislation, through Congress were clearly demonstrated in the case of the omnibus Lea bill of the 1943-44 session. Results are little chance of anything more than a beginning on over-all legislation.

International—In the international field, the "commonwealth company" proposition will continue to figure in the Congressional picture. McCarran plans to call for a Senate Commerce Committee vote on his revised "All American Flag Line" bill early in the session. Committee approval of the measure is a possibility, despite its approval as probable, and favorable House action over less likely.

Most of the aviation policy decisions during the coming months may well be made by the House and Senate Appropriations Committees via the granting and withholding of project funds.

Skewed into a post-war policy attitude for the fourth session, the committee is expected to shelve requests for military aviation appropriations, and thus requests for civilian aviation. Large outlays for new aircraft construction are probable, and any outlays that are made will have to be limited for.

Research—The 1945 Congress set a new record as aviation legislation. Its two major aviation bills, the McCarran Lea bill and the Senate-passed McCarran bill, Congress are expected to write out a five-year program of \$13,000,000 annually, smaller than that contemplated in the Lea bill, but greater than the program approved by the Senate.

Military conclusion—A Presidential veto to the aviation measure, because of an extensive employment service order, necessitates the re-passing of the bill.

Doolittle Will Be Speaker At Annual IAS Banquet

The Institute of Aeronautical Sciences has announced that Lt. Col. James H. Doolittle, past president and fellow of the Institute, will be the principal speaker and guest of honor at its Annual Luncheon Dinner to be held at the Waldorf-Astoria in New York Jan. 26.

First All-Jet Fighter Announced By Navy

A significant development in the history of naval aviation is the announcement of the FD-1 Phantom, designed and built by the McDonnell Aircraft Corp.—the first Navy fighter plane powered exclusively by jet engines and intended for carrier operation.

This first, already extensively flight-tested, design, the field of carrier operation, is the 32-ep 30-temper. The FD-1 has a service ceiling of well over seven miles and is the first Navy fighter to attain speeds in excess of 500 mph. The Navy reports that the plane, presently designed as an interceptor, has an extremely high rate of climb and a range of approximately 1,000 miles.

Development—The Phantom is powered by two axial-flow Westinghouse turbo-jet engines built into the wing roots. Of exclusive American design, the engines can run on long strokes or short. JATO units may be used for conditions where take-off assistance is needed. The plane is a single-seat, low-

First Jet Landing

The Navy has just declared that Ensign Jack C. Ward, a Navy (FD-1) Phantom fighter pilot, made the first jet-propelled landing on an aircraft carrier during qualification tests aboard the USS Wake Island, last November.

The Phantom, powered by both a turbo-jet and a conventional reciprocating engine, usually uses its reciprocating engine for take-off and landing, switching over to the jet in either an offensive or supplementary procedure here and there in the air.

Accident—Ensign Ward made his jet landing when his plane experienced an almost complete power failure. In the emergency, he was forced to make his landing approach quickly starting his jet engine he continued his approach and landed on the Wake Island flight deck. The Navy reports that according to all available records that the first time that an airplane using a jet engine as its major source of power had landed on an aircraft carrier, the carrier's jet long-held belief that such a feat could be accomplished successfully.



Navy Jet Fighter. Twin Westinghouse turbo-jets power this FD-1 Phantom, built for the Navy by McDonnell Aircraft Corp. Constructed at almost 20,000 lbs., it weighs less than 20,000 lbs. with full combat load.

C-W Says New Motor Sets Hp.-Weight Mark

The world's lightest air-cooled engine per horsepower is claimed by Curtiss-Wright for its new powerplant, which develops 1,450 hp., 75 more than its immediate predecessor in the Cyclone 9 series. The new engine weighs only 1,350 lbs. and delivers 1 hp. for each 35 lbs. of dry weight.

G. W. Taft, president of Curtiss-Wright and of its engine-building division, Wright Aeronautical, explained that basically the new engine is built on the same lines as earlier models of the Cyclone 9 type, and refinements in cooling, supercharger efficiency, and structure have enabled their engineers to take increased output from the 1,450 cc. in which have been standard displacement of the series for several years.

Additional planes for further experimentation and service testing will be delivered soon.

L. Ray Buckendole Elected SAE Head

L. Ray Buckendole, engineering vice-president of Yenko-Detroit Air Co., has been elected president of the Society of Automotive Engineers, it was announced last week at the SAE annual meeting in Detroit (See Transport).

Among 11 new vice-presidents, three were from the aircraft industry (George A. Page, Jr., director of engineering, Curtiss-Wright Corp.; aircraft engineering vice-president) Mark A. Ryder, consulting engineer, Pratt & Whitney, as aircraft powerplant engineering vice-president, and Charles F. French, chief engineer, Eastern Air Lines, as air transport engineering vice-president.

The world's lightest air-cooled engine per horsepower is claimed by Curtiss-Wright for its new powerplant, which develops 1,450 hp., 75 more than its immediate predecessor in the Cyclone 9 series. The new engine weighs only 1,350 lbs. and delivers 1 hp. for each 35 lbs. of dry weight.

Export Orders—The new engine is installed in the Curtiss 50-2 Bonanza and in other experimental military aircraft. Taft said that other domestic and foreign aircraft have been ordered. The engine's announcement of the sales will be made later.

Cooling has been improved by use of a new-type forced circulation cylinder head design. Among structural features are added strength gained through use of the forged head, stronger power transmission parts, all sets for increased cylinder and piston ring lubrication, high durability valves and increased own weight for improved detonation.

Supercharger—An "angelier engine" which adds to both pressure and efficiency of the supercharger is used in the engine to permit it to maintain power at higher altitudes than were attainable with former engines of the series.



THE BRISTOL 170:

Bristol's first post-war aircraft built in steel design, is a prototype of two structurally similar models, the passenger-carrying Whipler and the goods-carrying Freighter. The plane was given its first test flight recently at the Bristol plant. It is powered by two Bristol Hercules engines of 1,475 brake hp. It has a cruising speed of 130 to 140 mph and will carry a 5½-ton payload on a single carrier.

the Model 180 toward the operator market as a trainer and personal cross-country rental plane, while the Model 140 is geared more for the individual power flyer.

Both the 180 and the 140 have received approved type certificates from CAA. Deliveries are expected to start their first models in March.

Cessna points to its previous record in plane production in comparing its new models. The company was the pioneer trophy awarded for "The World's Most Efficient Airplane" three times. During the war it manufactured military trainers and utility planes in its company-owned plants in a contract built around the usual cross-plan arrangement. As a result of its production volume and efficiency it was one of the first manufacturers to receive the Army-Navy "B" award five times.

Fast Rocket Flight

Ground speed of 280.3 mph. for the 600 miles from Savannah, Ga. to Romeville, South Carolina, was reported for a flight made last week by the Johnson Rocket 180. The Ft. Worth-built plane glowed plain, powered with a 150-hp engine and did several 180° turns, made the trip in 3 hrs. 10 min. Johnson officials reported the speed was approximately 40 mph faster than the advertised cruising speed of the Rocket 180, indicating the tolerance of a strong tailwind.



ADMA OFFICERS:

New president of the Aviation Distributors' and Manufacturers Association, W. F. Scott, Jr., of Supply Services, Inc., Robertson, Mo. (left), receives praise from the retiring president, Tom G. Daggs, of Thompson Products, Inc., Cleveland. Daggs became chairman of the advisory board.

Briefing For Private Flying

A new hydraulic controllable-pitch propeller for lightplanes is expected to go into production soon as Continental Motors Corp., Mankato, Minn. The new prop, described by Continental President C. J. Jones as "particularly easy and efficient in operation and with many advantages over competitive propellers," will mark the company's entrance into this new field and undoubtedly will provide serious competition for other propeller manufacturers. Continental now has a dominant place as manufacturer of most of the engines in the first post-war lightplanes, and is likely to make a serious try for a like position in the lightplane propeller field.

AERONAUTIC EXPANSION—The American Aircraft Corp., head of directors has authorized an expansion program to increase production at the Middlebrook, Ohio, plant from 18 to 35 planes a day. Besides additional facilities for painting, welding, jig and tool making, material handling, experiment and testing, and additional mechanical conveniences, the new program calls for addition of a large personnel office and cafeteria for the employees.

THE BEST Laid PLANS—West Coast aviation folk are chaffing about a story laid on Lockheed, noted for its preparations to achieve supremacy on any new airplane which it is not yet ready to unveil. The story concerns the first test flight of the unscheduled Little Dipper, one-plane plane, many months ago. The flight was scheduled at Newhall Airport, in a flying area. Lockheed officials were confident that the local inhabitants, who eyed the Dipper with only casual interest, had little appreciation for what they were seeing. But then somebody asked one of the "bombers" waiting overhead which were obviously new. They strided casually away, after a thorough inspection, and left the airport in an uproar, so the story goes, which soon the residents of the Douglas Airplane Co., a principal Lockheed competitor.

CAF TRANSCONTINENTAL ROUTES—Colorado CAF flyers are preparing to step all known "bad will" about even the Rocky Mountains when upstarts and downstarts make flying hazardous for any lightplane. National CAF headquarters, acting the Colorado plan, is requesting to any CAF wing that such mapping is a service which can be extended by other states. Maps of all states, showing areas of forest, swamps, or badlands where there are several landing fields, would make it possible for private flyers to lay out transcontinental routes. Altitudes and emergency landing fields could be concentrated along these routes.

EVALUATING TO FRANCE—Two Experimental Transoceanic may be the first post-war American lightplanes to be exported to France, if a world-wide purchase of planes is carried out. A French woman pilot, the manufacturer reports impressed by the plane's performance, has asked permission to ship two of them to France for use in air show there.

GLIDER PARK PLANNED—Purchasers of T-9 and Table Mountain, near Golden, are under some discussion as being urged on city officials with the proposal that the area be used as a recognized glider center. Denver gliding enthusiasts are quoting L. J. J. Hines, Army gliding specialist, as saying that Table Mountain offers natural advantages for gliding field in few other locations in the country.

GLOBE SUB-CONTRACTS—Globe Aircraft Corp., Ft. Worth, has announced a contract for supplemental production of more than \$6,000,000 worth of two-place all-metal low-wing Swifts, the Texas Engineering & Manufacturing Co., Ltd., Dallas. The Dallas concern already has a contract to build Paillard P-24s under a similar arrangement with Paillard Aircraft & Engine Corp. John Kennedy, Globe president and his company already had more than \$10,000,000 worth of orders for Swifts, and that the additional production capacity offered by the Dallas concern was needed in order to meet demands at his Dallas and distributors.

DISCOVER PRODUCTION—Leopold H. P. Klotz, president of the Laramie Co. and writer of the Miami All American Air Magazine, revealed that production of "Discover" at the first new plant in Texas was scheduled to reach a rate of four planes a day last week.

—Alexander McNulty

Huge Miami Land-Water Base Under Construction on Island

Buty Cairns, noted speedster racer and pilot, heads company developing \$1,118,000 airport which also will provide parking facilities, hangars for 500 planes planned eventually.

Cairns Airport, a \$1,118,000 field for private land and seaplanes at Miami, Fla., is now reported under construction. It will be operated by the Four Winds Air Association, Inc., headed by M. D. (Buty) Cairns. Other Miami-Associated businessmen, speedster and plane pilot. The association plans to make this the first of a chain of private fly airports throughout the country.

Located on Lummus Island, south of Miami Beach, the new field is designed to provide facilities for private yachts, as well as for small business and pleasure aircraft.

Features—Planned include a 3,950-ft. runway for low-wing amphibian planes for sale, planes, buildings at the south end of the base for 50 to 100 small boats and yachts, controlled with full radio facilities, a complete restaurant, lunch room and cocktail bar, an aviation school for land and seaplanes, full maintenance and repair service, hangar facilities for 500 planes with additional tie-down facilities; sales rooms for planes, parts and accessories; an aerial photography service which will cover amphibian planes, a 1,900 sq. ft. charter plane service, and offices for the CAA.

Speedboat service between the new airport and Miami and Miami Beach will be operated at semi-regular intervals.

Programs—Plans drawn by General Airport Co., New York, call for development of the project in several stages as private funds needs expand. First stage calls for construction of the 3,950-ft. ESE-WNW runway with taxiways and a paved taxiway, two hangars accommodating 100 small planes, and two medium sized planes, a 100-ft. square ship hangar, administrative building, docking facilities for race seaplanes, with individual hangars for six small airplanes and two medium sized ones, an amphibian ramp providing access to the seaplane hangar.

A one-way traffic system for leaving planes to and from hangars permits a closer grouping of the hangars than would be practicable with two-way traffic necessitating planes passing each other in the

area. Sixty-ft. lanes are provided between the right-hand hangars in smaller planes, and 75-ft. lanes between the six-unit hangars for medium-sized planes, while medium lanes are 75-ft. wide or wider.

Second Stage—As seen in additional pictures at the airport, seaplane, another ship hangar and additional taxi hangars for more planes will be added.

Hangars are designed with special overhead doors which provide unique bracing against high winds with transfer of wind thrust to ground and overhead truss. The door is designed to be opened or closed easily by one person under normal conditions.

Notes—A sales building will be located so that every visitor to the island will have an unobstructed view of the building while the role of the hangar has been approached to the airport, so that manufacturers can hangar demonstration planes in the rear of their showroom sales.

Fueling will be done by truck delivery during early stages of the field development.

Officers—Officers of the Four Winds Air Association, headed by Cairns, are: Irvin Hunsicker, New York, vice-president; L. J. Cairns, P. W. Watz, USNR, as-

New Planes at Miami

Private firms who attended the Miami All American Air Magazine show only a few of the post-war light planes. But enough, which also cut down participation in the 1946 service, promised many "show models" in results.

Present were the Piper Super-Cruiser, the latest Ercoupe, the Glider Scout, the new Culver and the Johnson Rocket.

Word to Fly—So many planes attended the show that the parking situation ran out of hand. However, a number which carried some display spot, were weighed in without special recognition.

distinct vice-president, and N. J. Barrett, treasurer and secretary, both of Miami.

Most Cairns holds a commercial pilot license in addition to her experience in world record speedboat racing, in which she has won 56 cups in competitions in this country and in Europe.

Future—In estimating the growth of business at the new airport, General Airport Co. predicts that in the first year the tourist is a prospective customer only to the extent that he can be influenced to take flying lessons, buy an airplane, take charter or freeline on trips to nearby points. The tourist who flies his own plane to Miami for a vacation will be one of a small group for at least the next two or three years, it is predicted.



Cairns Airport Drawing of the proposed new \$1,118,000 Cairns Airport for private flyers at Lummus Island at the south end of Miami Beach, Fla., shows the 3,950-ft. airstrip, two hangars for 500 lightplanes, seaplane ramp, administrative building and ship hangar.

Speedway Aerocade Mapped

Plans for a "Fly to the Speedway" air tour for private flyers in conjunction with the annual Memorial Day Indianapolis Speedway 300-mile auto race are being developed at Indianapolis. Possibility of installing an airstrip on the infield of the 1 1/2 mile brick oval track is being studied.

Col. A. W. Harrison, president of Meriden-Harrison Co., Indianapolis, is chairman and Gene Hanson, Indianapolis News aviation editor, is secretary of a committee in charge of arrangements. Tentative plans call for an airport operations center headed by Robert Turner and Bob Stank, to make arrangements for handling the increasing private plane traffic. Landing fees would

be levied at a dollar on the one of Memorial Day, at which time they would be made members of an "I Fly to the Speedway" club. The club would elect officers and hold annual meetings in Indianapolis at various times.

Realities—According to William Shaw, president and general manager of the speedway, who will start at the Miami Air-Americas Air Meet, the tour might be placed somewhat along the pattern of the winter half-price tour to Florida sponsored by the Indianapolis manufacturers and the Gulf Oil Corp.

He and he and Tony Skakun, Jr., owner of the speedway, were studying possible airport sites near the track.

and under the new post-war flight-safetying standards prescribed in Part 25 of Civil Air Regulations. The plane is licensed both in the normal category for cross-country flight, and in the utility category for flight training.

The Voyager 150 is a high-wing monoplane of fabric and steel tubing construction cruising at 128 mph, powered with a 130 hp Continental engine. It is regarded as one of the best examples to date of what can be done to quiet the usual postwar plane by engine muffling and exhaust insulation.

Aviation Insurance 'Scramble' Forecast

A "scramble" on the part of insurance underwriters to get aviation insurance business is likely to have taken down well below what they should be on the basis of present accident rates. Albert J. Smith, vice-president and financial manager of U. S. Aviation Underwriters, Inc., New York, believes.

Writing in a recent issue of The Eastern Underwriter, Smith criticizes recent over-lazy aviation advertising "which would leave an unimpaired fellow with a feeling that after 34 years history he can fly in safety to his summer cottage or visit the folks in Peoria on weekends."

Forecast—If the buying public takes this type of advertising seriously, Smith predicts, "a lot of folks aren't going to be around very long to continue to purchase and insure private aircraft."

"It seems safe to say competition within this type of advertising seriously, Smith predicts, "a lot of folks aren't going to be around very long to continue to purchase and insure private aircraft."

Sakon, Ore., Sky Haven Plans Cabin-Hanger Units

Combination tourist cabins and individual hangar units will be constructed at Sky Haven, a new airport for private flyers seven miles north of Salem, Ore. The 50-acre field already has one turf runway in use and three others are planned. Operations are being handled by Joe Dawalt, Salem, and Miles O. Macdon, Portland. Ten of the cabin-hanger units are planned for the first stage of development with others to come later. Plans also call for a two-story wooden structure containing restaurant, offices and clubhouse.

have passed its campaign for quieter private planes with any good grace if its own imperfections were really assessed the country on the more BT-13's. And it is generally held that some levels of all personal planes must be reduced considerably, before proper answers will admit airports to residential areas where they must come of the private plane is to have real utility.

Voyager 150 Certified; Welsh Leaves Firm

Resignation of James C. Welsh as sales manager of the Stinson division, Consolidated Vultee Aircraft Corp., Wayne, Mich., and type certification of the Stinson Voyager 150 four-place personal plane, were announced by the company last week.

Welsh plans a vacation before making any other business commitments. His successor has not yet been named. Widely known in the light-plane industry, Welsh has been in aviation sales work for more than 20 years and has been a pilot for 25 years. During World War II he represented Convair in England for 16 months. Previously he had been with Convair's research department in New York and Washington, and in Eastern sales manager for Stinson. He was largely responsible for the Stinson division's postwar personal aircraft program.

Certification—The Voyager 150 has been assigned an FAA type certificate No. 747, which the manufacturer says is the first type certificate to

CAA Drops BT-13's, Will Use SNJ-3's

CAA inspectors will be provided with surplus Navy SNJ-3 planes instead of the surplus Army BT-13 planes originally scheduled. Administrator T. P. Wright announced last week.

Wright said the change was made after examination of surplus BT-13's disclosed that 300 mm hours of work would be needed to make these planes airworthy under CAA standards. Because of the cost of this modification, the SNJ-3, the Navy version of the North American Texan or Harvard, also supplied to the Army under the designation AT-6, has been chosen instead.

Notes—The change will provide the inspectors with a much quieter airplane, answering critics who had objected to the high noise level of the BT-13 when its two-blade propeller is in full pitch. The SNJ-3 has a constant speed propeller.

Comparison of the two trainers indicates that the CAA has gained in other respects by the substitution. Both planes have approximately the same range, around 750 miles, but the SNJ-3 cruises at 189 mph, as against 170 for the BT-13, and has a 12,000-ft. ceiling as against 21,000 for the BT-13. Both planes have flaps, but the SNJ-3 has hydraulically retractable landing gear while the basic trainer's undercarriage is fixed.

Progress—The change in planes is expected to smooth progress for private flying, indirectly, since the administration could not



What's the big news in aviation today? The Martin 202! Right now, large normal orders for the 202, exceeding millions of dollars, are on Martin's books. And this is only a beginning! More and more airlines are signing up. Record-smashing domestic and foreign sales are in the making. And in 1947 Martin will be turning over the 202 at a rate of 50 a month! Martin sets the pace for postwar air travel! It's the plane that most nearly meets ATA specifications for a twin-engine, medium-range transport. It occupies any plane of its class now flying. And it's backed by Martin's 37 years of advanced aircraft design! No wonder the airlines are piling up orders for the new Martin 202!

Here's Performance Plus!

Years ahead of the field, the Martin 202 flies 300 m.p.h. faster than today's transports... offers comfort unsurpassed by even the largest 4-engine craft... cuts operating costs to the marrow. This plane is not just designed for the airlines. It's designed by the airlines... constructed by Martin... to the most exacting standards of the air traveler.



THE GLENN L. MARTIN COMPANY • BALTIMORE 3, MARYLAND

PRODUCTION

Solar Develops Muffler Unit To Meet Lightplane Complaints

"Triple Unit" muffler, muffler and heater, made of stainless steel, designed to take advantage of positive exhaust noise; prefabricated muffler auto racer body also scheduled.

By SCHULER RANGS

Solar Aircraft Co. of San Diego may cash in heavily as a potentially big seller of product against unmuffled aircraft noise.

The company has developed for immediate production what it calls the "Solar Triple Unit," a single unit combination of muffler, muffler and heater for small personal aircraft.

Auto Race—In diversification efforts, the company also is ready to begin production of 48-in. muffler auto racer body kits for several distributors.

Solar's president, Edmund T. Price, claims for the "Triple Unit" a combined weight of less than 10 lbs. for two units required for a four-cylinder engine, interchangeability of right and left manifolds, an approximate reduction in engine noise level, and ample heat for both the engine and cabin and engine carburetor.

Stainless Steel—A feature of the unit will be its manufacture from stainless steel to extend the useful life well beyond that of the conventional mild steel muffler.

Solar's branching out into the manufacture of a single race auto body kit reflects both the company's interest in diversified manufacturing and readiness to accept employee ideas.

Two years ago Elmer Roon, member of the Solar research staff and a veteran racer and owner of model racing cars, asked a potentially large market for motor auto bodies to be sold to racers willing to spend their entire energy on power plant development rather than dividing time with the tedious shaping of bodies for their racers. His proposal was staged as a No. 1 post-war project, new in design with design ideas approaching a nation-wide boom stage.

Designs—The racer kit will consist of 15 die-shaped stainless steel units after stainless steel sheets fabricated by Solar, the assembled unit being engineered for added strength as well as easy replacement of crash-damaged parts. Manufacture of the kit will be undertaken by Air Associates.

Price told Aviation News that Solar's branching out into the manufacture of a single race auto body kit reflects both the company's interest in diversified manufacturing and readiness to accept employee ideas.

Solar, operating plants at San Diego and San Marcos, has reached the barrel bottom of recession slump and now, with an employment of one-third its wartime peak, will begin gradual hiring to meet demands for new commercial and military production.

Jet Work—Still restricted in developed work because of the company's jet engine parts manufacture and jet engine research. It is reasonable to assume that eventually may be induced to enter complete jet engine production.

Among the company's orders for stainless steel accessories is one for a lightweight muffler for jet trucks.

Price said his company has no intention of attempting to enter the kitchen appliance market, although to other aircraft companies.

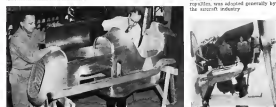
H. E. Guerin Resigns As Douglas Plant Head

H. E. Guerin, whose "Guerra" product is produced by Douglas Aircraft Co., with having been the most important single invention for aircraft engine production, has resigned as the company's Santa Monica plant manager after 30 years with Douglas.

He is replaced by G. A. Hargis, former manager of the Douglas Long Beach factory.

Guerin's invention cut in half the number of men needed for the processing of aluminum sheets. For the female die he substituted heavy rubber blankets which squeezed the female die shape under pressure exerted when the aluminum sheet was stamped.

Guerin's process became the property of Douglas, and through license agreements under which Guerin is said to have received a share in royalties, was adopted generally by the aircraft industry.



Solar Development's Diversification in Solar Aircraft's post-war production is typified by muffler auto racer body (left) and anti-noise unit (right) for personal planes.

Chute Plants Plan Non-Aviation Items

These Redding, Pa., manufacturers so many civilian goods field until aviation market stabilizes.

Three Redding, Pa., textile plants, which manufactured 484,500 parachutes for military use are planning non-aviation textile production for the immediate future, although one of the war-bum plants expects to return to manufacture of aviation products.

The manufacturers and their war production figures, reported last week: Aveneltextile Supply, Inc., 480,000 chutes; Redding Air Chutes, Inc., 236,000 chutes; and Varsity Site Mills, Inc., 41,500 chutes.

Redding Air Chutes is credited with making important contribution in parachute development, by the war department, including a canopy which would save the life of a 2,000 lb. bomb dropped from only 100 ft. altitude. The chute was a late development in production which it had only started at war's end.

John H. Guenther, president of Aveneltextile Supply, expects his company, which produced bare, aerial delivery and glancing parachute, previously of rayon, to return to aviation product manufacture in two or three years, after post-war equipment becomes more standardized. He also expects strong export prospects, as consumers use life preserver-parachute for jumpers as winging sailboats. But currently his firm is going into manufacture of fibre glass products, including sleeping bags which not carry fast frame hooks for boats without throwing; auto frame insulators, and fiber glass blankets.

Varsity Mills returned to its pre-war production of rayon and women's silk clothing several months ago. The company turned out 10,000 rayon women's escape chutes, as well as rayon cargo and aerial delivery chutes.

Jobs Up—James S. Fry, president of Redding Air Chutes, has announced his company has started production of rayon slaps and lampers, and by Jan. 31 expects to have 180 employees. Peak war employment was 260.

A statement by Fry, describing his company's wartime work, points out that his company pioneered in cargo parachute manufacture, producing heavy, rugged chutes for landing supplies and equipment, in four diameters, from 34 to 45 ft.

The 35 and 45 ft. diameter

chutes," Fry said, "were made of 3/4 in. basketweave nylon slaps, as strong or stronger than the 5 in. rayon material used in the 34 and 35 ft. envelopes. The poles were segmented and stretched on the line. A parachute at the time required a great deal of special handling, although one of the war-bum plants expects to return to manufacture of aviation products.

"Cargo parachutes delivered loads of several thousand pounds each and were frequently clustered to sustain very heavy loads in a normal rate of descent. The 45-ft. chutes were used in situation of have to drop fully equipped loads to marine survivors who were shut down over the sea.

"Aerial delivery parachutes were produced continuously from Jan. 1945 until the close of the war. The aerial delivery parachute was at all-rapen construction containing 24 poles, each cut from one section of cloth, and approximately 24 ft. in diameter. They were equipped with harness and ripers selected to the standard aerial delivery pack, but were also adapted to landing at supplies in many forms. They were made in naked, red, blue, green, yellow, and white. The purpose of the colors was to identify specific loads in field operations. This type of chute was rated to carry a load of 200 lbs. for release at an unopened of 100 mph, but was also adapted to clustering to sustain greater loads

when necessary.

Blank Chutes—The conventional blank parachute was designed to carry a 20 lb. fragmentation bomb which exploded on impact. This chute was approximately 100 in. in diameter, very heavily reinforced, and included a venting gun which relieved the opening impact against the canopy. The function of the bomb chute is to apply a brake to the bomb. This permits bombing from low level, holding the bomb on the target and still allowing the plane to escape.

"The Development Division at Redding Air Chutes, Inc., also created a parachute for dropping a 60 pound fragmentation bomb from 100 feet altitude and a series of parachute strong enough to prevent the descent of very heavy bombs. These bombs are dropped at speeds of 200 to 400 mph, the parachutes must be of extremely heavy materials having high strength, and frequently it is necessary to provide them with three vents to equal air fast and prevent upward load. Among them developed, 100 which weighed a 100 lb. bomb from 100 feet level; 250 lb. bomb to stop 100 lb. and 250 lb. bombs and in the course of development at the close of the war, a parachute had been devised to stop a 1,000 lb. bomb safely and, in addition, there was a parachute in the course of development designed to stop a 2,000 lb. bomb without setback. Large contracts for these were cancelled as war's end."



SURPLUS NO. 1,000.

Kenneth Thompson France Corp.'s Los Angeles agency made its 1,000th surplus plane sale when this C-47 was bought by Airfreight Manufacturing Co. for conversion into a flying laboratory. Standing before the plane are J. C. Garrett, Airfreight president; James W. Garlitz, contract operator of APC's Cal-Aero Field airport depot at Ontario, Calif.; George M. Adams, APC chief of surplus aircraft sales at Los Angeles; Stephen Brown, APC assistant supervisor, and Eddie Deland, Airfreight chief test pilot.

Square D Develops Airspeed Indicator

Development of a new maximum climb rate airspeed indicator has been reported by the Square D Company, whose vice-president, Varley R. Cariborn, says that aerodynamic development leading to light speeds even greater than those already attained by experimental military aircraft will be limited by quantity production of the new instrument.

Known as the Aero-type F-6, the indicator will provide pilots with warning as their planes approach critical speeds that are a threat to control and structural limitation.

Compressibility Problems—“Aircraft designers regard these instruments as a partial solution to the problems of compressibility phenomena, a pilot near the speed of sound when air surrounding a plane stops behaving normally,” Cariborn says. “In enabling a pilot to anticipate these trouble-shock waves, the F-6, besides its safety advantage will permit extensive study of our fastest planes at today's maximum speed limits.”

Originally conceived by the Air

Technical Service Command and the Bell Aircraft Corp., the idea was transferred into industry by engineers of the Rollman Instrument Laboratories of the Square D Company.

The F-4 airspeed indicator has two hands, a red one which indicates the maximum allowable airspeed and a white pointer which shows the plane's indicated airspeed. Thus the pilot needs only a glance to see that the speed required by the white hand never exceeds that indicated by the red.

SAE Discusses Use Of Exhaust Gases

Discussions before the annual meeting of the Society of Automotive Engineers on ways and means of making more effective use of aircraft powerplants, exhaust gases developed that many engineering problems remain to be solved before these waste products are fully used, with developments awaiting progress in metallurgy which will provide metals highly resistant to 3,000-deg. temperatures.

John J. Denney, of Consolidated Valve, told the Aircraft Section that

waste exhaust gases can be used in a built-in system to de-ice aerodynamic surfaces. He said that with such a system properly designed and installed, commercial flights could be scheduled with safety during severe icing conditions, extending flying hours and reducing overall costs.

He proposed that exhaust heat be forced by jet pumps through ducts within the structure to leading edge surfaces likely to become iced, and added that even the propeller hub assembly could be given ice protection.

Ralph L. Slavin, and Harry A. Goodwin, Jr., of Ryan Aeronautical, told the session that improved materials must be available before substantial progress can be made in utilizing exhaust gases, holding that stainless steel and Inconel were inadequate.

They mentioned a new material designated as 18-8DL, which was said to hold some promise, but added that its limitations are exceeded even before it has a chance to prove itself. Such materials, they said, must withstand temperatures of 2,800 deg. Fahrenheit and above, when incinerated they must have a heat resistance better than double that of any material now available.



NEW APPROACH ANGLE INDICATOR

Model planes show how the approach angle indicator developed by Westinghouse keeps pilots on the correct landing beam. The center plane is following the correct beam down the runway and a pilot following that path would see only green light in the indicator. The pilot of a plane in the top beam would see only an amber light, warning that he was too high, and the

pilot of a plane in the lower beam would see only red light, warning him that he was too low. A single 200-watt lamp furnishes all the light for the indicator which can guide airplanes in the proper path to the airport runway from four or five miles away. The view shows the rear of the indicator with its light source and reflector.



The Sign of Happy Flying

When you land at your home airport or at a strange field on cross-country, look for the Esso Sign. It's the sign of Happy Flying...your assurance of courteous and dependable dealer service, of quality petroleum products especially engineered for flying.

There are over 260 Esso Aviation Dealers between Maine and Texas who stand ready to serve you with quality gasoline, rust preventives, and engine, hydraulic and instrument oils. The products they handle are backed by more than 40 years of continuous aviation experience and the most complete

research organization in the petroleum industry.

Because of the know-how and experience that stand behind them you can be sure Esso Aviation products are quality products.



NOW AVAILABLE...Three brand-new Esso Aviation gasoline lines, unleaded 80 octane; improved grades 91 and 930 with reduced lead content and higher performance numbers.

INCENTIVES FURNISH THE DRIVE

THE COMING YEAR, 1946, and the years to follow can bring unprecedented prosperity to the people of the United States if the incentives to secure it are provided.

We have the advantage of starting with a country which has demonstrated a capacity for expansion unequalled in any other country in the world. Our economy has demonstrated, also, one grave weakness—a recurring interruption of the upward trend of production and living standards by wasteful and paralyzing periods of recession. Recovery from each depression always has come to us in new heights of economic welfare, but the toll of the years of blight has been harmful to everyone.

The job ahead of us is a dual one. We must maintain the vitality of an economy which, over the years, has yielded an enormous increase in the American standard of living, and we also must improve its stability.

The Dynamics of American Production

In the last prewar year, 1940, the population of the United States was 3½ times as large as it was in 1870. But the national production, measured in dollars of constant purchasing power, was 10 times as large at the end of the period, and industrial output had increased 39-fold.

In the meantime, the average number of hours of factory workers had been reduced from about 63 per week in 1870 to less than 49 in 1940, while average hourly earnings had more than tripled in dollars of constant purchasing power. This "boom" weekly or annual wages in manufacturing had doubled over the 70-year period, even though the work-week was cut by 33 per cent. This was made possible chiefly by a tremendous increase in the quantity and quality of the mechanical facilities which were provided in American manufacturing industry. Manufacturing capital investment per worker was multiplied by 6 times over the period in question. But the

return per dollar invested, while it has fluctuated widely between good years and bad, showed no general upward trend over that portion of the period for which measurement is practicable.

Incentives in American Manufacturing

There has been, historically, a remarkably consistent pattern in the division of the realized income from the expanding manufacturing output of America. Reliable statistics are not available for so far back as 1870, but from 1899 through 1939 the average share of wages and salaries has been 82½ per cent against 17½ per cent as the share to investors (including dividends, interest, rents, royalties, and non-corporate profits). These have been, from year to year, relatively minor divergences from this pattern of distribution, but there is no discernible trend during the period away from the averages cited.

It is suggested that the persistence of the average 17½ per cent share of realized income from manufacturing that was maintained for the 40 years preceding World War II may represent the proportion that is needed to produce the dividends, interest, rents, royalties, and non-corporate returns that will provide for the continuing investment upon which an expanding productivity such as we have had in the past depends. At any rate, it would seem useless to depart too radically from such an established pattern at a time when unprecedentedly large private capital investment is counted on to make up for the drastic curtailment of such investment during the war years, and to carry us to the new high levels of civilian production set as our postwar goals.

The Distribution of Manufacturing Income in War

At the beginning of the war, the Government adopted controls and a tax program designed to prevent wartime activity from resulting in un-

duly swollen private returns. Due primarily to huge volumes, the profits before taxes of manufacturing industry were very high, but throughout the war its profits after taxes averaged returns no larger than they had been in good prewar years. Relative to volume, they were considerably lower than in prosperous years in the past. Again, there can be no complaint at results that generally were in accord with a national wartime policy.

But it is fair to note that the wages of manufacturing labor were allowed to increase substantially during the war. Between January 1, 1941 and April, 1945, average weekly earnings per worker increased by 77 per cent. This was, in considerable part, a result of increased working hours and a shift from low- to high-paid industries, but straight-time hourly earnings on the same jobs increased about 46 per cent against a cost-of-living rise of about 36 per cent.

The net result was to alter drastically the 40-year relationship of the 17½-82½ per cent division of Realized Income from Manufacturing. The share of wages and salaries increased to over 90 per cent, and the investment share shrunk to less than 10 per cent.

Its Postwar Distribution

This wartime shift in the proportion of distributive shares has an important bearing upon current wage controversies. With union demands for wage increases ranging up to 20 per cent, and the economists of the Office of War Mobilization and Reconstruction asserting that an average increase of 24 per cent is feasible without raising prices, it is pertinent to inquire how such increases would affect the prewar ratios that governed realized income distribution in manufacturing.

Forecasting is always hazardous, but if we assume (1) that in 1946 we shall reach the \$160 billion level of national output which the Government proponents of general wage increases expect, and (2) that there will be little increase in productivity because of the continuing process of reconstruction, and (3) that the Government will succeed in carrying its announced purpose

to maintain present price ceilings, it appears that a 24 per cent general wage increase would reduce the share going to capital from 17½ per cent to 11 per cent even allowing for its increased return resulting from the repeal of the excess profits tax. The prewar ratios would be about maintained if wages remained at present levels.

Conclusion

Since the maintenance of these prewar ratios was accompanied by an unparallelled rise in the "real wage" of American workers, there is a powerful prima facie case for not tinkering with them. It should be noted, however, that some economists think that the size of the investment share of manufacturing income tends to provide more capital than can be absorbed by a mature economy, and thus contributes to those breaks in the expansion of the economy which, as stated at the outset, have been its principal blight.

Regardless of what may ultimately prove to be the validity of this view, no one can responsibly contend that at this early but crucial stage in the reconstruction process is the time to test it. Now, no one knows whether, or what dimension of, additional wage increases can be supported without forcing up prices or reducing profits to a point that will discourage vitally needed private capital investment.

We want high and increasing wages in American manufacturing. We need them to provide an active incentive to workers to support expanding productivity, as well as to continue the trend of rising living standards in America. Equally, we need a continuing profit incentive of sufficient attractiveness to call forth the new investment upon which expanding productivity depends.

We can never attain our dual objective if we push one of these aims so far and so fast that it defeats the other.

James H. McGraw, Jr.

President, McGraw-Hill Publishing Co., Inc.

THIS IS THE END OF A SERIES



The plane that flushed an idea from a hot-dog stand—

With all the improvements on today's planes, it seems strange to think that airplanes haven't always had parking facilities.

Back in the early days of flying, Eddie Stinson landed at a mud field in North on Michigan with a passenger.

Ready to take off, Eddie found that his starting battery had gone dead. So he told his passenger to open the throttle a little bit while he started the motor by

pulling the propeller through.

The motor started with a rattle! The passenger confused, had poked the throttle wide open. Eddie jumped clear as the plane roared down the field.

But dead about was a hot-dog stand that couldn't jump!

The plane tax into the stand. At 1600 r.p.m., the propeller churned mud, pop, hot dogs, and here lies a look

Only then did the passenger remember to shut it out of the ignition.

The hot dog stand cost Eddie Stinson \$200, plus a new propeller. But it showed him a way to make planes safer!

Two days later he had rigged up a parking hook to operate with hooks on landing wheels.

Years of flying showed Eddie Stinson what birds wanted in a plane. So the first Stinson he took back in 1925, was a plane aimed at by day. Besides hooks, it had an enclosed cabin, an electric starter, and a radio beacon.

Because Stinson has always been a leader, you can depend on Stinson to bring you the best in quality planes.

Answering THE STINSON VOYAGER 250...Here's a few plain clips that will bring you speed, safe, and comfortable air travel.

And six travel luxury such as you have never seen before, except with larger, more expensive planes!

The Voyager 250 cruises at 125 m.p.h., has a maximum speed of 145 m.p.h., and a range of 200 miles. Its power, maneuverability, and high altitude performance make it a versatile plane anywhere.

And the appointments of the Voyager 250 match its performance. Its cabin is comfortable and roomy. You'll fly in comfort on its richly upholstered, adjustable seats.

And economically, too! For cost of operating the Voyager 250 will compare favorably with the cost of operating your car.

Write for a free illustrated brochure telling all about the Voyager 250... to Stinson Division, Consolidated Vultee Aircraft Corporation, Wayne, Michigan.



Illustration of a Stinson Voyager 250 aircraft, showing the aircraft's design and the Stinson logo.

Stinson

EASY TO BUY... EASY TO FLY

Stinson Division, Consolidated Vultee Aircraft Corporation, Wayne, Michigan

SPECIAL AIR SERVICES

CHARTER NON-SCHEDULED INTRASTATE

BUSINESS BOOMING

At Least 12 New Freight Lines Expected Soon on West Coast

Air terminals receiving flood of inquiries from organizers in search of base facilities; potential shippers ready to fill all cargo planes which become available.

Availability of surplus C-47s and primary antisubmarine may be expected to infuse the appearance on the West Coast of up to a dozen new non-scheduled air freight companies within the next few months.

Air terminals are receiving a flood of inquiries from organizers of such companies, seeking hangars, shops and tie-down facilities.

Airports—With an eye on business which undoubtedly will develop between the United States and Mexico, Long Beach Municipal Airport and Los Angeles Airport probably will receive part of entry destinations within the month.

There is every indication in the Southwest, and at Los Angeles and Long Beach, that air freight carriers on 48 as many C-47s as they can obtain with permits for fast delivery of mail, parcels and freight. Rates of 10 to 20 cents per ton mile. Whether the lure of the market will lead to a disastrous overlooking of hidden ground operating costs remains to be seen.

New Services—One of the most recent freight-carriers to start flight operations is Pacific Air Cargo Co., headed by H. J. Givens, and based at Los Angeles Airport. At the same airport Los Angeles Air Service has begun operations as a charter company using a C-47 for either cargo or passenger hauling.

Seeking space at Los Angeles Airport as a third company, National Air Cargo Corp., headed by S. J. Jackson, ex-Almy Ryan, whose operation is typical.

Prospects—"I could use today any number of cargo planes air company could fly its loads on," with C-47s our unobscured cargo, dependent on volume and our ability to sign volume deals to carriers, will range from 15 to 25 cents per ton mile," he says.

"A 3000-mile cross-country trip

Airborne Orchids

Growers and exporters of domestic and foreign orchids on the West Coast believe that within the space of a few months practically all of their air-shipped consignments will be airborne.

They believe the chartering of entire planes for special "orchid flights" across country in meeting seasonal demands for the luxurious bloom.

Illustration of a commercial air service to States of ready has resulted in removal of orchid shipments, and more than one orchid grower in several States is considering the use of chartered planes to harvest and market orchids from Mexico and Central American jungles.

rates to fly perishables out of produce areas which can be served by planes but not by heavy transport planes."

Principal hazard of such non-scheduled operations, and one that few beginning operators seem to consider, is the cost with which potential profits may be leveled and even dipped into red ink by unforeseen operating contingencies.

Headwinds—While the small non-scheduled company is not confronted with the heavy overhead of regular airlines, which must maintain large ground crews and build-



READYING NEW PLANES:

National Shipyards Freight Corp., expanding its non-scheduled air freight operations, has contracted with North American Airlines, Inc., for modification of two of five surplus C-47s which the firm purchased recently. North American Air turned to modifications of military transports to use a portion of its war-surplused factory space and labor force. Shown here, as the first C-47 was turned over for modification, are (left to right) George McIntyre, NSF maintenance chief, Gary Stroh, North American supervisor, Robert King, NSF chief radio technician, and Thomas Hayswood, NSF chief engineer.

ing facilities of regular landing points, it faces serious cut-backs by the very lack of such service organizations.

Whether it is a business risk in that the non-scheduled air freighter may be forced to put down at an airport which has little or nothing in the way of equipment. If servicing facilities are available they are likely to be primarily for the use of airlines renting the equipment, or owned outright by the airlines.

• **Cases**—The non-scheduled freighter is subject to the delay of receiving service when and if the regular airline can give it as a convenience. It also runs into as having to pay retail prices for fuel and oil, and to prove for maintenance and repairs when obtainable.

A minor accident and repair job easily may cause a trip contract, from the time standpoint in comparison of manufactured goods as from the standpoint of spoilage in shipment of perishables. With one and two-plane companies the effect of a weekend accident easily will delay coming power indefinitely in the light of the present scarcity of flyable equipment.

It is highly possible that completion of these factors accounts for the apparent unsuccess of scheduled air carriers over the threat of non-scheduled encroachment on their business.

• **Best position**—However, some air terminal managers are concerned over the carrying equipment of non-scheduled services, and they foresee the inability of their airports to provide space for the new enterprises.

Also, one Southern California air terminal manager also is concerned with the objection he feels that his municipal airport owes to air freight customers regarding the performance ability of non-scheduled companies using the airport.

He reports that during the past week he has received 15 inquiries for space from prospective non-scheduled operators, but will enter into no rental agreements until the prospective owner has given satisfactory showing of his company's financial stability and operating ability.

• **Responsibility**—He told AVIATION NEWS:

"Air freightage certainly has become so generous that it behooves every airport manager to protect the eager shippers and service alike against a non-scheduled company that conceivably may be organized solely as a short-term stock speculation venture."

Matson Line Keeps On Its Toes

Still kept on the sidelines with other airline carriers, Matson Airways Co. will maintain through an aircraft overhaul and modification service at Oakland, California, the maintenance of an airline-scheduling organization.

In the meantime, F. A. Selley, Matson president, will combat the threat of air encroachment upon his company's rich Hawaiian trade by advertising the advantages of scheduled flying and cost-shared flight-outside service.

• **Plans**—Matson's Air Transport Division, headed by T. A. Schmidt,

has during the war with the outbreak of World War II, "Transport Service plans, will begin normal modification and overhaul with an investment of \$10,000 in new tools and equipment, and will occupy two hangars at Oakland Airport.

Beforehand of Matson's "watchdog" action, the time when the company may gain a certificate to fly to Hawaii is a company publicity release stating that "pilot and other flight personnel" are maintained on the personnel roster of an Oakland Airport operation.

Farmers, Air Industry Urged to Cooperate

Most promising field for initial development of air cargo is in the field of agricultural products, Eugene E. Wilson, chairman of the National Industries Association, believes.

Wilson, who also is vice-chairman of United Aircraft Corp., told a dinner meeting of the National Council of Farmer Cooperatives that aviation and agriculture, working together, can in the near future revolutionize food and produce marketing for the benefit of the whole nation.

• **Cooperation**—The two should act together to speed development of air transportation to create additional employment and income, as well as contribute importantly to the national security, Wilson said, adding that each industry had accomplished the impossible during the war and should now cooperate for equally vital postwar objectives.

"Aviation and agriculture already have completed experiments which demonstrate that with the cooperation of government, farmers, shippers and the trade, great savings in the volume of fresh farm produce shipped by air are to be expected in the near future," he said.

For example, it has been authoritatively estimated that almost one-third of the fruits and vegetables shipped from out of the great Winter Garden area might go by air, if the air freight rate could be brought down to 10 cents per ton mile, for example.

• **Barriers**—He failed to impart some serious laws relating a reluctance in rule "arbitrary Government restrictions which prevent the use by operators of the full potential of cargo aircraft specially

designed for the job of carrying farm products."

Wilson suggested that agriculture and aviation should work with shippers to remove those and the other barriers to steady development of transport types especially needed for the air cargo job.

National Skyway Freight Increases Fleet to 11

Addition of five surplus C-47's to the National Skyway Freight Corp. fleet, and removal of operations and maintenance base from Long Beach to the Los Angeles Municipal Airport, has been announced by Robert W. Pennington.

All the C-47's are being modified as cargo carriers, with installation of automatic heat control and double rear cargo doors. Two of the planes are being converted to bi-level American Airlines Corp.'s new modification plant at Inglewood, California. The remaining three are being converted by Globe Aircraft Corp. at Ft. Worth, Texas.

• **With**—With the new planes, the line, also known as the "Flying Tiger Line" will have eleven planes

Canadian Transport Board Schedules Two Hearings

The Canadian Air Transport Board will hold hearings in mid-January on applications for commercial non-scheduled charter services applied for by Leavitt Bros. Ltd., Toronto, for a service out of Vancouver, B.C., to anywhere in Canada, Newfoundland and the United States, and by Aircraft Industries of Canada Ltd., Montreal, for a service to any point normally within a radius of 500 miles of Montreal.

Give 'em plane facts!

We've continuously giving 'em plane facts, because *Mechanics Illustrated* has the kind of readers who expect facts. They want details, too—the kind of down-to-earth truth that comes in handy when they're up in the air. They go for such a full-page item as "Sky Signposts" in the December *Mechanics Illustrated*—it's a quiz on map symbols and survey signs. A professional, an amateur or just an air-minded groundling can get the answer if he doesn't know them. But there's plenty more in that December issue—including clear photographs of

Goodyear Aircraft's new fighter plane which goes up to 7,000 feet a minute—and a full color picture article showing how student mechanics learn the complicated fuel and hydraulic systems of the Douglas C-54...



Even more of our business is giving our readers the newest—first. The "Flying wing" (pictured at right) for example, is just being tested now. But our authoritative article, complete with photographs and colored diagrams, has already been read by the men who bought the December *Mechanics Illustrated*—and judging from their response, we really published something in "Something New on the Wing."

The magazine that makes plane facts exciting



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But—plenty—it's your business. It'll tell your story to the greatest air-minded market in the country, the young, eager, coupon-clipping readers who are making *Mechanics Illustrated* the most up-and-active magazine in the aviation field.

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PERSONNEL

Prescott A. Tolman Named Sales Director of EAL



Prescott A. Tolman has been appointed director of sales for Eastern Air Lines.

Mr. T. Tolman, personnel manager of the Pratt & Whitney Aircraft Corp. of Hartford, has been appointed general manager of Eastern Air Lines and Propeller division of United Aircraft Corp., succeeding James P. Jeffrey who has resigned. Before joining EAL he held the position, having joined Eastern in 1940 and leaving to go to United in 1944.

Carl A. Fower has been assigned by the Civil Aeronautics Administration as its Russian office with the Caribbean Defense Command and assigned to the governments of Central and South America as its agent for distribution problems. Fower will be stationed at Bogota, Colombia.



William C. Fower, Jr. has been assigned by the Civil Aeronautics Administration as its Russian office with the Caribbean Defense Command and assigned to the governments of Central and South America as its agent for distribution problems. Fower will be stationed at Bogota, Colombia.

Three New Appointments Are Announced by CAA

John E. Bates (left) has been appointed deputy chief of the technical development division of the Civil Aeronautics Administration. He is returning to CAA after three years with the Whiting Corp. where he was



director of development. David S. Jenkins (right) has been appointed as chief of the airport development section and Joseph Baum has been named assistant to the general sales officer.

Marshall Russell has been appointed eastern division public relations director of American Airlines System with headquarters in New York. He succeeds Peter J. McMahon, who resigned to become assistant director of public relations for Abbott Russell Co., advertising agency. Russell is a former newspaper man and served as a public relations capacity with The American Airlines.

Col. Harvey C. Miller, in terminal leave from the Air Transport Command, has been appointed superintendent of operations for Air Corps Transport Corp. Prior to his entrance into the Army, Col. Miller was assistant supervisor of maintenance for the board of governors of the Southern Railway System.



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Frank G. Barker has been appointed superintendent of maintenance and ground operations for Northwest Airlines following a consolidation of the ground operations and maintenance departments. That post was created to centralize responsibility and authority and to provide closer cooperation. Barker, joining Northwest in 1940 Barker was with National Air Transport and Eastern Airlines.

Justin E. Long has been appointed by the General Petroleum Corp. as its eastern representative for Oregon



TWA VICE-PRESIDENT:

Rep. Geo. J. Lusk, who figured prominently in one of the war's most important diplomatic missions as a member of General Eisenhower's staff, and who has been named a vice-president of Transcontinental & Western Air, Inc., as a member of international relations in conjunction with the airline's overseas operations.

and Southern Maine. He will act as chairman for the board of governors of the airline. Lusk previously was a member of the House of Representatives and served as a member of the House of Representatives and served as a member of the House of Representatives.

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TRANSPORT

U. S., Britain Begin New Attempt To Resolve Air Transport Fight

Each apparently enters Bermuda conference as act as over on having its own way, however, and firmly adhering to the standpoint it held when Chicago session ended.

The United States and the United Kingdom will attempt in the Bermuda civil aviation conference opening tomorrow to make the conference that possibly threatens to split the world into two warring spheres of influence in the field of international air transport.

They have tried before on several occasions, notably at the Chicago civil aviation conference in November-December, 1944, and indications are that this time each party begins negotiations as adamantly determined on having its own way as ever.

Mr. C. C. Clegg, U. S. State Dept., is expected to get to the airport established around the globe, in an effort to force the issue on the British, that might be persuaded into regulations which would make sense of this country's success to date in seeking freedom-of-the-air.

Britain, unable to incorporate services for several months, has nothing to gain by haste and is in a strong bargaining position, as even American authorities acknowledge, to win the argument for partial controls on at least the airlines between the United States and the British Empire.

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Thus the United States will, (1) oppose any kind of formula designed to divide carrying capacity, (2) seek "unlimited" expansion of the Fifth Freedom of the Air and, (3) possibly will take the position that if rate controls are to be introduced at all, it should be the function of carriers and not of governments.

The British will continue their

position that "unlimited expansion" must be eliminated. They would accomplish this through frequency regulation, adjustment of seating space to fit traffic, fare controls and tight restriction of the Fifth Freedom, if they accept it at all.

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To emphasize the United States intention to retain the maximum degree of bargaining power, the Civil



EAL TRAVEL AGENTS MAKE 1946 PLANS:

Representatives of Eastern Air Lines met at New York recently to talk about 1946 travel trends and expansion of passenger service. Left to right around the table are George E. Michael, manager at EAL's New York Department, who called the meeting, Mrs. Charles A. Barker, New England Division agency manager, Frank H. H. of Detroit, Great Lakes Division agency manager, Fred S. H. of Miami, Southern Division agency manager, Thomas W. H. of New York, agency representative, and Leo F. C. of Chicago, Central Division agency

Aeronautics Board last week at the last minute world-wide judgment on the traffic conference agreement framed by the International Air Transport Association in October at its Montreal meeting.

It was felt, according to reports, that action on the IATA agreement just as the Bermuda conference was about to begin, might have weakened the United States position. Thus this country now enters a new air conference with Britain still having given no official show of approval of rate-making in the maximum British sphere.

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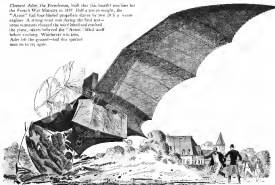
The Board had said that "in view of the importance of the conference with the British, the Board concluded that the public interest of the U. S. requires that any further consideration of a decision" be delayed.

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The Wreck of ADER'S "AVION"

(Suppose men had quit trying after that)

Clément Ader, the Frenchman, built this (his last) machine for the French War Ministry in 1897. Half a ton in weight, the "Avion" had four bladed propellers driven by two 20 h.p. steam engines. A strong wind rose during the first test—some moments elapsed the wind blew and reached the plane, after which the "Avion" lifted itself before crashing. Witnesses who knew Ader left the ground and flew quickly into the sky again.



THE AVION was an aviation milestone. Inquisitive men needed men inspired from the behavior of that early flying machine—and, with added knowledge, went on to build better planes.

That progressive process has never stopped. Though the years Northrop has been a part of it, contributing many an aviation "first" to produce better, safer and more efficient airplanes.

For instance, in 1931, the Northrop "Alpha" was the earliest thing to aviation. The first all metal, semi-cantilever monoplane with antiskid wheels, wingtips, a few more the U.S.A. in 22 years. Yet "Alpha" was old in 1954—by that time Northrop's "Genova" was pioneering the stratosphere and flying

the same distance in less than 12 hours.

Even the revolutionary planes of war (including Northrop's own P-61 Black Widow) are no longer "new" since you'll be seeing the Northrop F-100 Mustang. A few years you'll be seeing the Northrop F-4 Phantom II. A few more years you'll be seeing the Northrop F-5. The same process has never stopped. For better aircraft are built, producing better service, more peace. And better service can help achieve peace through cooperation, safety, faster world travel and commerce.

The job ahead for aviation is still big. So big, in fact, that it can be accomplished only by an industry that continues to be strong and progressive.



NORTHROP
Creators of the Black Widow
and the Flying Wing

State Department, Garrison Nathan, deputy director of the Office of Strategy Studies, chief of the Department's Aviation Division, L. Welsh Pogue, CAB chairman, Oswald Ryan, Marine Branch and Josh Lee, CAB members, and George Hines, CAA's general counsel.

British Sir Wilfrid Brindley and L. J. Darnley of the Civil Aviation Ministry, N. J. A. Chastelain of the Foreign Office, Major J. S. McCulloch of British Overseas Airways Corp., and Sir Henry Self and Peter Mansfield of the British diplomatic representation in Washington.

▲ **Agenda**—The Bermuda conference in addition to attempting to settle the economic questions outstanding between the two countries will consider commercial use of military air bases built with American funds and materials on British soil during the war. These include the 60-year lease issue in the Western Hemisphere as well as a number of other important ones around the world.

In a formal statement, Baker said last week that the two countries "appear to be far apart" on "important issues," but he was confident "that the same overall approach between the two countries will bring a successful agreement in civil aviation as was accomplished in telecommunications five weeks ago."

► **Pressure**—American sources reiterated last week they expect that the latter success this meeting is having in winning adherents to freedom-of-the-air is encouraging Britain to re-examine its opposition.

Later, addition, according to Foreign reports, to the Fifth Freedom advocates was Canadianization which reportedly signed a bilateral agreement last week. Turkey, which has joined the Convention on International Civil Aviation, is expected about to sign a similar agreement.

► **Buffalo to Intervene**

Reverting from past policy, the City of Buffalo will formally intervene in aviation matters affecting it when CAB hearings are held within the next few weeks. Corporation Counsel Fred C. Mulvaney has announced Corporation Counsel Casimir T. Partzky, Buffalo's legal expert on aviation and airport matters, will testify.

Mulvaney said he will make a thorough study of the city's past policy at not intervening at CAB hearings on airline applications.

Land to Take Over At ATA Jan. 16

Shelves plan for vacation after leaving shipping posts; Ranspach already on job

Henry S. Land plans to go to work as president of Air Transport Association Jan. 16, day after his resignation is effective in elevation of the Maritime Commission and Administrator of the War Shipping Administration.

He would like to take a little time off, he told AVIATION NEWS, but "they've waited for me long enough."

At ATA it was said the presidency was offered the retired vice admiral at least two months ago. Acceptance hinged on White House reaction to his withdrawal from the Maritime Commission and WSA. The resignation was accepted same days ago, effective Jan. 15.

As Ranspach—Land will go to the Association as a neophyte, to see his own work, but his record shows that he is far from entering a new field. He learned to fly at Naval Air Station at Pensacola, Fla., and Anacostia, D. C., in 1915, and was a naval aviator and observer. From 1920 to 1930 he was vice president and treasurer of the Oppenheim Fund for Promotion of Aeronautics, and from 1933 to 1934 was a member of the Army and Navy Medical Board and National Advisory Committee for Aeronautics. He was assistant chief of the Bureau of Aeronautics from 1936 to 1940.

It appeared last week that Land will be the second of the new trustees of ATA officers to go on the job. Robert Ranspach, former General Counsel in Georgetown, held his first industry meeting last week as the Association's new executive vice-president when plans were mapped for ATA participation in the recent air mail conference with Post Office Department officials.

► **Arnold**—Nathan W. Arnold, new operations and engineering vice-president, was in the hospital with the flu and it looked as though some time might go by before he is able to start work. Arnold recently left the Army where, as brigadier general, he was acting chief of staff of the Air Transport Command.

The Association will need more people to accommodate its growth. The personnel, clerical and executive staffs of its new executives, and increases under its expansion pro-



Robert Ranspach

gram (AVIATION NEWS, Feb. 7). However it has leased an eight-story building near its present headquarters.

Expectation is that ATA will be using two floors of the building by Feb. 15 and probably all of it by April 1. Some of the departments will move as fast as the new quarters are available, while others, including the executive office, will remain where they are until the final move.

Administration Building Planned at Seattle

The Port of Seattle at Seattle, Wash., expects to add bills in February or March for construction of a \$2,000,000 administration building at the Seattle-Tacoma airport, built during the war by the Civil Aeronautics Administration.

Plans call for a five-story restaurant-servicing structure, 158 x 478 ft., plus two-story office wings and a one-story 304 x 135 ft. garage. The building will be of modern construction, with a shared basement air conditioning system, soundproof treatment, air freight and three passenger elevators, insulation and fire doors.

TCA Bans Ruling

Trans-Canada Airlines rules between Victoria and Vancouver were raised Jan. 1 to equal those of Canadian Pacific Airlines. CPA runs a local service, while TCA is permitted to carry local traffic between the two cities on its transcontinental route because of the aircraft shortage. The rule ruling was made by the Canadian Air Transport Board at Ottawa, on complaint by CPA against lower TCA rates, after an investigation of operating cost.

Realistic Approach to Problems Characterizes Airmail Meeting

Post Office Department, CAB and airline officials confer in Washington to discuss study of possible revenues if all first class mail were carried by plane.

By MERLIN MICKEL

A new active and realistic approach to domestic air mail problems was demonstrated last week's Washington meeting of Post Office Department, Civil Aeronautics Board and airline officials. Significantly, it was the first conference of all three groups to discuss this question.

The fact it was called by postal officials was seen as encouraging evidence of the department's recognition of the importance of close-airline working relations and those assigned to the Civil Aeronautics Act, which states that the Civil Aeronautics Authority shall consider the development of an air-transportation system properly adapted to the present and future needs of the postal service.

Study Prepared—Specifically, the Post Office desired to ascertain CAB and the industry with a study completed by Inspector George R. Miller, showing the effect on postal revenues of carriage of air mail by air, at varying rates of postage, possibilities of carrying parcel post by air, international postage rates and related subjects. It was the first time such detailed information had been made available.

Representatives of the meeting pointed to the time all first class mail will go by air, but even the Post Office department officials, generally thought to favor such a move, took no position as to when that time might come. Miller's data demonstrated that the switch on first class mail has been effecting a de-

cline in other classes, and reduced profit from first class mail, such as could be expected if all of it were carried by air, might result in an overall loss to the department. This brought up the old question of extent to which mail on second and lower classes might be subsidized.

Profit—The inspector's study showed that while first class mail alone would still show a profit of \$10,000,000 it all were carried by air, the department's overall mail would then be \$123,000,000 a year, without addition of new employees. The loss would increase if employees were added. He said further that air, the department's overall loss from 6 to 8 cents an ounce, with first class mail increasing to go by surface carrier, would still mean a \$10,000,000 profit on air mail, although there would be an overall deficit of \$85,000,000.

Reduction of air mail fee to 5 cents is supported by the airlines. Robert H. Standen, chief executive vice-president of Air Transport Association, asserted ATA would support legislation for the 5-cent rate, and favors a gradual reduction until no distinction remains between air mail and other first class mail. He said carriage of parcel post by air suggested many problems, including priorities and rates. Air parcel cards are not favored by the airlines if they entailed heavier handling facilities at airports, and, in further air mail use, proposed that the department consider all forms of transportation, especially by local postmen, and a program of

advertising, posting air schedules, and smaller devices.

Facilities—Miller told the 199 persons who packed the hearing room that facilities for handling mail are adequate at any two of the 20 airmail fields now used. He selected 39 points for principal fields and airport secondary facilities at 174 points.

Increases in the number of surface planes were advocated by Lt. Gen. Harold L. George, commanding general of the Air Transport Command, who said he wants to see a "great air transport fleet as an adjunct to air power."

56 Seats Provided In PCA C-54's

The converted C-54's being placed in service this month by Pennsylvania-Canadian Airlines will provide a seating capacity of 56 passengers with 32 seats on one side of the aisle and 24 on the other.

Rear wall of the cabin has been moved about 5 ft. aft. All the front there are seven baggage compartments. Coal room is at the bulk. Two bulkheads will serve meals from two bachelors. Men's and women's berths are back of the cabin. Conversion also entails reinforcement of the floor structure, and installation of heated floors, a new cabin heating and ventilating system, air conditioning and cabin lights. Seats will have individual reading lights, and there are heat ventilators and parcel racks. Cabins are being equipped with an oxygen high pressure system.

111 on Way—PCA is putting 15 of the planes into service at a conversion cost of about \$775,000 each. First to join its present fleet of DC-3's is one of the 13 latest C-54's allocated to the company last October.

It will be used between Washington and Chicago and Washington and Norfolk. Remainder of the 15 are to be in service by the end of spring.

Flexible Feederline Patterns Are Urged

CAB New England Area Case and agencies highlighted by New York Post Authority proposal.

Establishment of flexible local air service patterns on a seasonal basis was urged on CAB last week by the Post of New York Authority. The proposal highlighted and argument in the New England Area case, search to reach the Board for decision. Board members displayed interest in methods of drawing such patterns.

Suggestions—Based on the idea of some type of air service for all communities of substantial size, the Post Authority, in the case introduction, said the pattern should include:

- Frequent service linking towns of reasonable size with frontier junction points.
- Market service linking cities and towns in a local region with those centers where community of interest lies.

- Service linking major traffic generating centers with major vacation and recreational areas.

"To effect 'non-trunkline' service at the many communities, the authority suggested issuance of 'flexible certificates' giving the operator freedom as to exact scheduling as he is served on particular trips and allowing him to adjust service to seasonal and other variations in demand."

Danger—Citing a view expressed by Board Member Oswald Ryan on the danger of intimate scrutiny control through intricate regulation, the Authority contended that CAB would be focusing too little proper adequate attention to development of local service.

Examples in the case have recommended Western Airways of Worcester, Mass., for temporary certification for non-feeder routes in Southern New England, Colonial Airlines for permanent extension of AM 72, and Southern Airlines for a route from Burlington, Vt. to Portland, Me., via intermediate points, on a three-year trial basis (AVIATION NEWS, Oct. 8).

Plan—Wiggins and the Commonwealth of Massachusetts, in service, planned for five-year temporary certification, contending that three years would be insufficient to demonstrate feeder service potentialities. They also reminded the board that a five-year basis for

Surplus Allocations

Two domestic airlines processed C-54's last week from the Surplus Property Administration to do first allocation. In 23 two-engine and three two-engine planes were allocated.

Three C-54's were to be used and two to Northwest, which also received one C-54B. A C-41 (which SPA describes as an aerial, passenger version of the C-47) was allocated to Civil Aeronautics Administration.

Other allocations—Five C-54's were to the Netherlands Government, four to the Netherlands Indies Government, two to Charles A. Christian, New York City, whose firm will convert and road them, two to Edward E. Traylor, Washington, wing as agent for the purchaser, two to Latin American Airways, and one to The Shorvik Corp. One C-53 was offered to Scottish Aviation and one to Air Portugal.

equipment depreciation is satisfactory.

Slipway Corp. of Providence, R. I. proposing helicopter service exclusively, argued that suitable equipment is as near the market as will be available before year. Board decision. Detail of its application now, Sligway said, would be in "less important advantages of early experimentation."

Businessman Barton Friedrich and Joseph Fitzmaurice recommended detail of Sligway's application, however, on the grounds that helicopter would not be available "within a reasonable time."

Braniff Buys 18 202's, PCA Orders 15 More

Additional orders for 33 Martin 202's totaling around \$7,800,000 were announced last week. Fifteen will go to PCA for representative \$3,000,000 and 18 to Braniff Airways for more than \$4,800,000.

Braniff becomes the fifth airline to order the two-engine transport which is expected to be available early in 1947. PCA's order is a renewal, following by less than two months in order for 30, the first to be placed for the new airplane which is especially designed for short-haul operations.

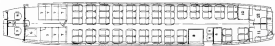
Equal orders—The manufacturers brought to 350 the number of 202's now on order, with total value close to \$10,000,000. Martin also is converting C-54's for both configurations.

Elsewhere, Pan American Airways received delivery of the first of 28 Lockheed Constellation. The 35-passenger four-engine ship was flown from Lockheed Air Terminal to Miami and thence to LaGuardia Field, New York. PAA expects to put it in service on the North Atlantic this month.



TCA PUTS LORAN IN SERVICE

TCA is using LORAN radio equipment as its trans-Atlantic Lancelot transports. The Long Range Navigational equipment allows accurate fixes at well over 600 miles from the transmitting station in daytime and over 1,400 miles at night, with better-than-ordinary accuracy. Photos show a LORAN receiver in use by a TCA navigator on a trans-Atlantic Lancelot.



Floor Plan of 36-Passenger DC-6—Drawing shows seating arrangement at PCA's converted C-54's. Numbers refer to (1) instrument panel, (2) pedestal, (3) pilot's seat, (4) co-pilot's seat, (5) observer's seat, (6) radio compartment, (7) baggage compartments, (8) baggage, (9) lavatory unit, (10) rest room, (11) men's lavatory, (12) women's lavatory. Eight rows of passenger seats accommodate three each and 15 two each.

Bargaining Between ALPA, Airlines Seems Headed for Showdown

Operators protest united front, want committee headed by Dawson to represent all in negotiations, offer of \$0.5,000 for ocean work turned down by union.

By BLAINE STUBBLEFIELD

Bargaining between the airlines and ALPA, the strong Air Line Pilots Association, over pay and working conditions, seems headed for a showdown.

The operators, presenting a unified front in lieu of company negotiations, by agreement have organized a committee headed by Ralph Duncan, president of American Airlines to negotiate with ALPA, especially on flying converted C-54 equipment in international service. The agreement has been filed in accordance with law, with CAB, which will either approve or disapprove it. The Board might possibly turn an opinion, but this is unlikely.

▶ **No Materialism**—Dave Behrke, ALPA president, is reported to have declined comment at his Chicago headquarters, saying that release of information to the press on the negotiations was a breach of faith. Officials of the Air Transport Association said they would suggest to the airlines wage negotiation committees that it issue a clarifying statement at an early date.

Observers have predicted for years that when the supply of qualified pilots, trained at government expense for war, far outstrips requirements, operators would take issue with ALPA, which has done little being a closed shop and already increasing selection

Filip Sarpas—Thousands of discharged military transport pilots, qualified on two- and four-engine equipment, are available, after refresher and route time, for airline service. Certain airline officials say they will hire these men, at rates much lower than those demanded by ALPA, unless a satisfactory agreement is reached. They said also that they would get qualified ex-military and superinstructors in the cockpit of tomorrow.

Current union drivers in other industries are supported by a shortage of manpower, whereas the girls are faced in their demands by the competition of non-union applicants for the jobs.

CAB Powers—CAB, in making rules for the airlines, has taken

improvement of various rail lines, including inland. Apparently, the Board is equally on watch for the Board could possibly interfere with proposals aimed at by collective bargaining under the Railway Labor Act, as provided by the Civil Aeronautics Act. Nevertheless, some pilot pay affects the cost of air mail service, express service and the public interest in travel. It is believed the Board could strongly influence conclusions in this controversy. On American flag foreign services, the Board has no rate authority except to prevent discrimination, preferential treatment, and subsidies.

Airline officials confirmed reports that they had offered the pilots \$18,900 per year for international operations, and \$22,500 for domestic service, and that these offers were not accepted and are now withdrawn. That negotiations by the newly-appointed committee presumably start from scratch except where contracts are in effect. They said it was true that the pilots had asked for \$22,500 on in-

domestic men, and \$35,569 on DC-9s on domestic routes. That would be for eight-year seniority men working 80 hours per month.

F Committee—The airlines labor negotiation committee consists of representatives of American Airlines, Braniff, Eastern, United, TWA, and PCA. The others have given the committee power of attorney to act on wage contracts, on all types of equipment, including DC-9's.

TWA officials confirmed reports that their trans-Atlantic operations have been held up since Dec. 30 by failure to reach agreement with the pilots. One spokesman for another company said in his opinion the pilots are "conducting a silent strike."

Backcountry—It is understood that the agreement reached between the wage committee and the pilots on pay scales for DC-9s will be retroactive to the start of operations. Presumably the pay rate on TWA DC-9s elsewhere is being considered as a yardstick.

Delta To Use Parsers

First-class service aboard the 64-passenger DC-4's Delta plans to have in service this spring will include a purser in addition to the usual stewardess.

Delta says it will be the first use of a flight purser on domestic airlines. The purser's duties will include responsibility for passengers during flight, collection of tickets and loading of passengers, and supervision of loading and unloading of cargo and mail.

The Air Transport Command told Aviation News that in July it had 1,534 pilots qualified to fly four-engine airplanes, in August it had the year-time high of 1,815; in September 1,641, October 2,334, and in November 4,332. Probably 1,680 more have been discharged since the figures were compiled. This means that nearly 3,000 four-engine pilots, all capable at flying two-engine planes also, are out of service, and an unknown number are serving in Japan. The Navy also has discharged several thousand, the exact figure not immediately available.

Discussion of Airports Scheduled in California

The first attempt to develop a complete answer to all objections to airports will bring together area planners of two major West Coast counties, Los Angeles and Orange, in a special meeting in Glendale, Calif. Feb. 19.

The conference has been called by the Planning Congress of Los Angeles County to determine what can be done to overcome opposition to airports. A portion of the meeting will be devoted to a round-table discussion between one or more airport opponents and airport proponents.

Sacramento Airport Vote

Securities, Calif. voters soon will vote on a \$204,000 bond issue which, with another \$380,000 to be provided by the Federal government, would be used to improve Sacramento Airport, shortly to be restored to city use by the Army. Major changes planned include construction, terminal administration building, taxiway, ramps, sewers, water, electricity, maple hangars, garages and additional land.

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PICAO Resumes Work After Holiday Recess

Air Navigation Committee holds first meeting of new year; interim council schedules first 1946 season for Jan. 21.

Its holiday season over, the Provisional International Civil Aviation Organization set to work again in Montreal last week with the Air Navigation Committee holding the first of the New Year's meetings.

It was devoted mainly to the reports of various technical subcommittees, more officially termed "divisions," which have been piling up steadily. Latest completed installments on scotch and roses, landing areas and ground aids, rules of the air, and aeronautical maps and charts.

► **Schedule**—Other new subcommittees which will hold initial meetings before the end of the month include those on personnel and planning; medical investigation; facilitation of international air transport; and airline operating practices.

FICAD's Interim Council will hold its first meeting of the new session Jan. 21.

Fresh from a trip to Dublin, London and Paris to prepare for regional conferences on air navigation facilities, Dr. Edward Warner, Coated president, held a press conference at which he announced officially that the North Atlantic Conference in Dublin would begin March 4, to be followed by the European region discussions in Paris on April 8.

Major Task—It was expected that about 100 delegates, advisers and staff would attend the Dublin meeting, Dr. Warner said, and "considerably more" at the Paris discussions. They will probably last two or three weeks.

Major task of these conferences—the North Atlantic mostly concerns air transport on this continent—is to arrange for the continued operation of air transportation facilities set up during the war for military needs. This involves first deciding what specific facilities are useful for commercial transport and then working out a plan for distribution of expenses of their upkeep.

Operations—In many cases it is expected that the same men who undertake the operations and coast maintenance of establishments such as weather ships on the high seas and meteorological stations in Greenland, however, must be shared.



TWA TRANSACTION

Prize money in TWA's recent sale of \$26,880,000 in 2 percent stock, long held by the company, was distributed to the Equitable Life Assurance Society upon Mrs. Margaret Foster Ewell, left, assistant secretary of TWA, and Miss Helen R. Taylor, assistant secretary of Equitable. The money will be used largely for purchase of 24 Conestogas. In addition to being the first new such large-scale equipment program has been financed with a long-term secured loan of this type, the transaction is believed to be the first of such size in which two women executives signed the papers.

by all the states in proportion to the interest involved.

The PICAD route service conferences, as they are to be known, also will have to decide on procedures to arrange for publication of navigational information, and make allowances in their final plans for anticipated future development. Above all, they will strive, through application of PICAD standards and recommended practices, for world uniformity.

Reading, Penta., Schedules
Airport Improvements

Reading, Penn., has increased its appropriations for airport improvements in 1946 by \$100,000 because of anticipated expansion in commercial and civilian flying. The airport budget was set at \$126,000.

City council recently engaged Gilbert Associates, Reading, expects to draw plans to convert the field from "a 90 percent military installation to a 100 percent commercial enterprise."

• The Bending Army Air Field, which occupies most of the airport, has been placed on inactive status and all military planes removed. Lt. Col. Frank H. Barber, commander, announced.



DISCUSSION AND CONCLUSIONS

DOWNPAYMENT: A \$75,000 downpayment for Pan American's January Dinner Key airplane base at Miami is returned by James E. Yonca, PAA attorney (left), James A. B. Curry, Miami City manager. The city is buying the base, which includes a terminal building and three hangars, for \$1,485,000, and will convert it into a yacht center.

SAE Session Hears Weather Discussions

Airline representatives were against heavy revision of current insurance loading procedures.

Methods to alleviate air traffic jams and bad weather holdups at airports were suggested at last week's meeting of the Society of Automotive Engineers in Detroit by John F. Gill, chief check pilot for Eastern Air Lines, and E. A. Currell, who returned to American Airlines last week as superintendent of flight development. Both are stationed at LaGuardia Field.

Gill cautioned that any improvements based on present air navigation and traffic control systems must necessarily be a temporary expedient, since future traffic volume will require "much closer flight on airways than current facilities can tolerate." Therefore he feels an entirely new approach to the problem may be necessary, with "pioneering solutions" offered through principles of radar and television.

"Witchful Thinking"—Currell observed that current talk of automatic landing of commercial aircraft by radar, radar or electronics is witchful thinking. He believes that visual landings must continue, with more attention is given to terminal approach and runway lighting installations from the pilot's viewpoint.

In their talks at SAE's Air Transport session, both proposed installations along the lines of their

desired by the Air Transport Association. CATS suggested two safety margin directions from 1,000 ft to 1,500 ft and the other 4 ft, either from the end of the runway, and development of a traffic holding pattern to be flown by all arriving pilots. GII recommended a complete system incorporating advantages of the vertical radio beam runway, localizer, curved horizontal radio beam glide path, and radio compass to permit hovering as airport equipment beaver stations. Both stressed need for adequate high intensity approach lights.

Dispute—All of them are on ATA's program, but not all are agreed to by Civil Aeronautics Administration. ATA, for example, wants ADF outlet locations, now about 3 miles out, brought to a spot 4½ miles from the airport as approach-outlet paths can fly a tighter pattern. Approaches now have two 15-meg vertical footcandle and a few in-circuit footcandle and glide paths. But ATA finds approach lighting systems inadequate, and wants ADF having same power to suggest the lighting. CAA between the housing standards are relatively weak, though it recognizes the need for a glide path, runway locations and also ground spots and buffer area.

density approach and runway lights, all of which are part of its structure.

Montro Lashes Out Against Integration

C. Bevel Moore, president of PCA and vice president of Air Transport Association, struck out last week against proponents of integration of the various forms of transport in a speech in which he described the Association of American Railroads as "that powerful group of skilled lobbyists and political tacticians."

The AAR, he said, has provided the "most determined and consistent opposition" to the federal airport development plan.

PTAA Secured—He declared that the Transportation Association of America, "the Charley McCarthy of a powerful and astute railroad industry," is working for the integration of transportation, which McGro called "actually a honey-trapped



Chaos At Miami

IF the shocking lack of organization marking the Miami Air-Maneuvers serves as a lesson to every other city contemplating an air show, perhaps it was all worth while after all.

Any event of such size requires an unbelievable amount of planning and work. The legal and writing Manuevers appointed only a few days earlier to their various tasks labored commendably. But an experienced leader with organizing ability, an constant control of a swiftly moving and elegantly appointed staff, simply did not exist.

There was no single show headquarters where top executives could be contacted by their own organizations or the press. Top executives did their own legwork, and could seldom be found. They kept the program in their pockets making changes by the minute until the events actually were started.

Individual contractors operated valiantly, but usually inefficiently, on their own.

No one counted registration, so one knew how many lightplanes had arrived, no newcomers were ever made to reporters. A friendly attorney was named publicity chairman.

Private flyers who were making financial sacrifices to reach Miami were offered \$10 or \$15 hotel rooms miles away on Miami Beach. Special arrangements with hotels for Air Manuevers visitors appeared never to have been thought of. Regular rates were in effect generally.

The Transportation Committee functioned well but arrangements at the guest airport got the hundreds of visiting lightplanes far from the stands. Both the parking areas and stands were far from regular transportation. Spectators were away from the planes and were discouraged from walking along the edges of the roped area to admire the variety of ships.

The contrast with the planned and smoothly functioning Oklahoma City annual chance and Birmingham air shows was pathetically glaring. Miami needs a Steady Adler and a Stanley Dreyer.

The Customer Is Never Right

AERONCA Aircraft Corp. is making an effort to correct the wide variation in quotations made by operators for repair and overhaul. A

manual has been compiled for its dealers and operators listing suggested flat rates. The operator checks the time needed for any job, multiplies it by the hourly rate charged, adds the cost of materials, and totals the cost of the work before it starts.

While many operators will disagree with the efficacy of such a system, the fact that one of the nation's leading lightplane manufacturers is tackling the problem, rather than deploring it, is worthy of a note of encouragement.

Why so little is being done throughout personal aviation to give more attention to complaints of private plane owners is one of the mysteries of this industry. The attitude that the customer is never right can wreck the revenues the operators receive already. Wiping it out is as important today as more airports and better lightplane designs are to expansion of personal flying tomorrow. Scores of returning veterans setting up their own small bases and fighting for business please take note.

Recognizing a Friend of Aviation

THE New York Times and its publisher, Arthur Hays Sulzberger, have been awarded the Frank M. Hawks Memorial Trophy in recognition of their contribution to the development of aviation. The action will be applauded by the aviation world.

Comprehensive, dependable coverage is nothing unusual for the Times, but close observers in aviation have noted this distinguished newspaper's unusual attention to aeronautics, both in the amount of space devoted to it during the newspaper shortage when thousands of dollars of advertising was being rejected and as pronounced display of such stories, frequently on the most competitive front page in American journalism.

The Times' intelligent optimism on the future of U. S. commercial aviation has been outstanding. To Mr. Sulzberger: The citation does not make fitting reference to Times writers Reginald Cleveland, Fred Graham, and John Stuart who have written so many aviation stories and editorials in recent years.

ROBERT H. WOOD



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